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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PELLANT: FORD, GARRETT N.

DOCKET NO.: 122142.00008

SERIAL NO.: 10/743,570

FILED: 12/22/2003

EXAMINER: NGUYEN, SON T.

ART UNIT: 3643

TITLE: SHOCK-ABSORBING BUSHING FOR STIRRUP

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

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CERTIFICATE OF MAILING

I hereby certify that on this 26 de day of October, 2005, this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Mail Stop Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Kathleen C. Tennant

TO THE COMMISSIONER FOR PATENTS

BRIEF ON APPEAL

Dear Sir:

This is an appeal from the final rejection dated 10 June 2005.

REAL PARTY IN INTEREST

The real party in interest is EasyCare, Inc., the assignee of the entire interest in the above-identified application.

RELATED APPEALS AND INTERFERENCES

No related appeals or interferences are currently pending.

STATUS OF CLAIMS

Claims 1-17 were originally filed. These included the independent claim 1 and its dependent claims 2-8, the independent claim 9 and its dependent claims 10-12, and the independent claim 13 and its dependent claims 14-17.

Claims 5-12 have been canceled while claims 1, 2, 4 and 17 have been amended.

Claims 1-4 and 13-17 are on appeal.

STATUS OF AMENDMENTS

No amendment was filed subsequent to final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1 is an independent claim directed to a stirrup. The stirrup comprises a carrier 10, a holding member 12 on the carrier 10 for holding a strap 20 and a footrest 18 joined to the carrier 10 (page 1, lines 11-24 and page 2, lines 4-5). The stirrup further comprises a bushing 40 mounted on the holding member 12, and the bushing 40 includes an inner sleeve 32 adapted for snug connection with the holding member 12, longitudinal fins 44 extending radially from the inner sleeve 32, and an outer sleeve 42 connected to the fins 44 (page 8, line 19 to page 9, line 2 and page 9, line 22 to page 10, line 5).

Claim 13 is a second independent claim and is directed to a bushing 40 for a stirrup holding member 12. The bushing 40 comprises an inner sleeve 32 adapted for snug connection with the holding member 12, an outer sleeve 42 substantially concentric with the inner sleeve 32 and a plurality of longitudinal ribs 44 connecting the inner and outer sleeves 32,42 (page 8, line 19 to page 9, line 2 and page 9, line 22 to page 10, line 5).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- A. A first ground of rejection is that of claims 13 and 14 under 35 USC 102(b) as being anticipated by U.S. Patent No. 3,515,417 to Bowman.
- B. A second ground of rejection is that of claims 1-4 under 35 USC 103(a) over U.S. Patent No. 6,220,004 to Hsi-Chang in view of Bowman.
- C. A third and final ground of rejection is that of claims 15-17 under 35 USC 103(a) over Bowman.

ARGUMENT

For convenience, the appellant has attached as Exhibit A a copy of the drawings filed in the above-identified application. The drawings consist of Figures 1-10.

Also for convenience, the appellant has attached as Exhibit B copies of the references relied upon by the PTO in the final rejection of the claims.

A. Rejection of claims 13 and 14 under 35 USC 102(b) as being anticipated by U.S. Patent No. 3,515,417 to Bowman

Bowman teaches a bushing 14 which consists of a sleeve formed with a central bore 16 and a rim 17. A multiplicity of longitudinally extending splines 18 project from the sleeve of the bushing 14 and cause the bushing 14 to be self-centering when inserted in an eccentrically disposed bore 11b of a hub member 11a.

Claims 13 and 14 specify a bushing 40 having an inner sleeve 32, an outer sleeve 42 and a plurality of longitudinal ribs 44 connecting the inner and outer sleeves 32,42. In rejecting these claims, the PTO considers the hub 11a,11b of Bowman to constitute an outer sleeve of the bushing 14 of Bowman.

By the PTO's reasoning, whenever a bushing is inserted in an element, the element is automatically transformed into part of the bushing (similarly to the bushing 14 of Bowman, any bushing is typically in snug engagement with the element in which it is inserted so that the reasoning applied by the PTO to the Bowman bushing should extend to all bushings). This reasoning is obviously erroneous since an element which receives a bushing is generally incapable of functioning as a bushing due to its configuration and/or due to the fact that the material constituting the element is unsuitable for use in a bushing. A bushing constitutes a discrete and distinct member which, as noted by the PTO, serves to guide a first element with

respect to a second element and/or to reduce friction between the second element and the first element. In the case of Bowman, the bushing 14 functions to guide a pedestal 12 with respect to the hub 11a,11b and the latter does not form part of the bushing 14.

Furthermore, while the PTO is entitled to assign a broad interpretation to claim language, this does not mean that the PTO can arbitrarily assign a name, and hence a function, of its own choosing to an element in order to meet the terms of a claim. Bowman clearly discloses that the element 11a,11b is a hub and, unless the PTO can demonstrate that the configuration and material of the element 11a,11b of Bowman allow the element 11a,11b to function as a bushing, it is improper to assert that such element 11a,11b forms part of a bushing.

Thus, in contrast to the appellant's claims 13 and 14, the bushing 14 of Bowman lacks an outer sleeve so that these claims are not anticipated by Bowman.

Re: claim 14

Claim 14 sets forth that the inner sleeve, ribs and outer sleeve are an integral unitary structure. The phrase "integral unitary structure" indicates that the inner sleeve, ribs and outer sleeve are of one piece which is not the case for the hub 11a,11b and the bushing 14 of Bowman.

B. Rejection of claims 1-4 under 35 USC 103(a) over U.S. Patent No. 6,220,004 to Hsi-Chang in view of Bowman

Hsi-Chang discloses a stirrup 10 which, as seen in Figs. 1 and 2, includes a carrier 14,16, a holding member 58 on the carrier 14,16 for holding a strap and a footrest 22 rotatably joined to the carrier 14,16. The holding member 58 is in the form of an eye.

Figs. 5 and 6 of Hsi-Chang illustrate a connection assembly 64 between the eye 58 and the carrier 14,16. The connection assembly 64 comprises a screw 66 having a head 70 which is press fit in the eye 58. The connection assembly 64 further comprises a nut 72 which is screwed onto a shank 68 of the screw 66 as well as a second nut 74 which is press fit into the carrier 14,16. The shank 68 of the screw 66 is screwed into the nut 74. The nut 72 is provided with a projection 76 while the nut 74 is provided with a cooperating projection 78.

The connection assembly 64 is designed to allow limited relative rotation of the eye 58 and the carrier 14,16. When the eye 58 rotates clockwise or counterclockwise relative to the carrier 14,16, the projections 76,78 on the nuts 72,74 eventually come into abutment thereby preventing additional relative rotation of the eye 58 and the carrier 14,16. The limited relative rotation of the eye 58 and the carrier 14,16 is desired by Hsi-Chang so that a strap passing through the eye 58 does not twist, and thereby irritate a horse, when the foot of a rider turns or twists while in the stirrup 10.

Claims 1-4 recite a stirrup comprising a carrier 10, a holding member 12 on the carrier 10 for holding a strap 20 and a footrest 18 joined to the carrier 10. The stirrup further comprises a bushing 40 mounted on the holding member 12, and the bushing 40 includes an inner sleeve 32, longitudinal fins 44 extending radially from the inner sleeve 32 and an outer sleeve 42 connected to the fins 44. In rejecting the claims over Hsi-Chang in view of Bowman, the PTO states that Hsi-Chang is silent about a bushing with an inner sleeve, an outer sleeve and longitudinal fins but that Bowman teaches such a bushing. The PTO holds that it would be obvious to substitute the bushing of Bowman for the connection assembly 64 of Hsi-Chang since the bushing of Bowman and the connection assembly 64 of Hsi-Chang are functional equivalents.

In discussing the rejection of claims 13 and 14, the appellant has already pointed out that the bushing of Bowman lacks an outer sleeve. Accordingly, even if the bushing of Bowman were to replace the connection assembly 64 of Hsi-Chang, the stirrup of claims 1-4 would not be obtained inasmuch as these claims specify a bushing having an outer sleeve.

Moreover, it is abundantly clear that the unthreaded bushing of Bowman is not the functional equivalent of the threaded screw 66 and threaded nuts 72,74 constituting part of the connection assembly 64 of Hsi-Chang. Unlike the screw 66 and nuts 72,74 of Hsi-Chang, the bushing of Bowman is incapable of limiting relative rotation of the eye 58 and carrier 14,16 of Hsi-Chang. Hence, it cannot be obvious to replace the connection assembly 64 of Hsi-

Chang with the bushing of Bowman. On the contrary, substitution of the bushing of Bowman

for the connection assembly 64 of Hsi-Chang would negate the specific intent of Hsi-Chang.

Re: claims 2 and 4

Claims 2 and 4 set forth that the inner sleeve, outer sleeve and fins are an integral unitary

structure. As noted earlier for claim 14, the phrase "integral unitary structure" indicates that

the inner sleeve, outer sleeve and fins are of one piece which is not the case for the hub

11a,11b and the bushing 14 of Bowman.

Re: claim 3

Claim 3 recites that the bushing is made of polyurethane. The appellant does not find any

disclosure in Bowman that would lead one of ordinary skill in the art to make a bushing out

of this material.

C. Rejection of claims 15-17 under 35 USC 103(a) over Bowman

Re: claim 15

Claim 15 specifies that the bushing is made of polyurethane. As stated above in relation to

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claim 3, there appears to be no teaching in Bowman which would suggest to the person of ordinary skill that polyurethane may be employed for a bushing.

Re: claim 16

Claim 16 states that the inner sleeve, fins and outer sleeve are an integral unitary structure made of polyurethane. As pointed out by the appellant in the discussion of claims 13 and 14, Bowman fails to disclose a bushing having an outer sleeve. It follows that this reference is incapable of suggesting a bushing in which an outer sleeve forms an integral unitary structure with fins and an inner sleeve. Furthermore, as noted previously by the appellant, the phrase "integral unitary structure" indicates that the inner sleeve, ribs and outer sleeve are of one piece. Consequently, even if the hub 11a,11b of Bowman were considered to be an outer sleeve of the bushing 14 of the reference, Bowman could not suggest claim 16 inasmuch as the hub 11a,11b is not of one piece with the bushing 14.

Re: claim 17

Claim 17 sets forth that the inner and outer sleeves are connected to one another by four ribs.

While the PTO is of the opinion that it would be obvious to make the bushing of Bowman with four ribs depending upon the guidance or reduction in friction one wished to obtain, this is not the case.

The bushing of Bowman is intended to be self-centering in an unmachined hub or the like as described in column 1, lines 23-29 of the reference. Subsequently, in column 2, lines 27-42, Bowman states that, when the bushing is inserted in a rough or eccentric bore, the splines on the major axis side of the bore are deflected less than the splines on the minor axis side. This teaching, together with Fig. 4 of the reference which shows that the splines deflect by different amounts circumferentially of the hub 11a,11b, leads to the conclusion that the bushing of Bowman requires substantially more than four splines in order to be self-centering as intended by Bowman. Thus, it appears that four splines would not allow the bushing to properly adjust to the irregularities of an unmachined bore circumferentially of the bore.

Accordingly, the appellant believes that claim 17 is not obvious from Bowman.

In view of the foregoing, it is respectfully submitted that the rejections of the claims should be reversed in their entirety.

Respectfully submitted,

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CLAIMS APPENDIX

1. A stirrup comprising:

a carrier;

a holding member on said carrier for holding a strap;

a footrest joined to said carrier; and

a bushing mounted on said holding member;

wherein the bushing includes an inner sleeve adapted for snug connection with the holding member, longitudinal fins extending radially from the inner sleeve, and an outer sleeve connected to said fins.

- 2. The stirrup of claim 1, wherein said inner sleeve, outer sleeve, and fins are an integral unitary structure.
- 3. The stirrup of claim 1, wherein said bushing is made of polyurethane.
- 4. The stirrup of claim 1, wherein said inner sleeve, outer sleeve, and fins are an integral unitary structure made of polyurethane.
- 13. A bushing for a stirrup holding member comprising:

an inner sleeve adapted for snug connection with the holding member; an outer sleeve substantially concentric with the inner sleeve; and a plurality of longitudinal ribs connecting the inner and outer sleeves.

- 14. The bushing of claim 13, wherein said inner sleeve, ribs and outer sleeve are an integral unitary structure.
- 15. The bushing of claim 13, wherein said bushing is made of polyurethane.
- 16. The bushing of claim 13, wherein said inner sleeve, fins and outer sleeve are an integral unitary structure made of polyurethane.
- 17. The bushing of claim 13, wherein said plurality of longitudinal ribs connecting the inner and outer sleeves consists of four ribs.

EVIDENCE APPENDIX

Not applicable.

RELATED PROCEEDINGS APPENDIX

Not applicable.

EXHIBIT A

Figures 1-10 of the above-identified application.

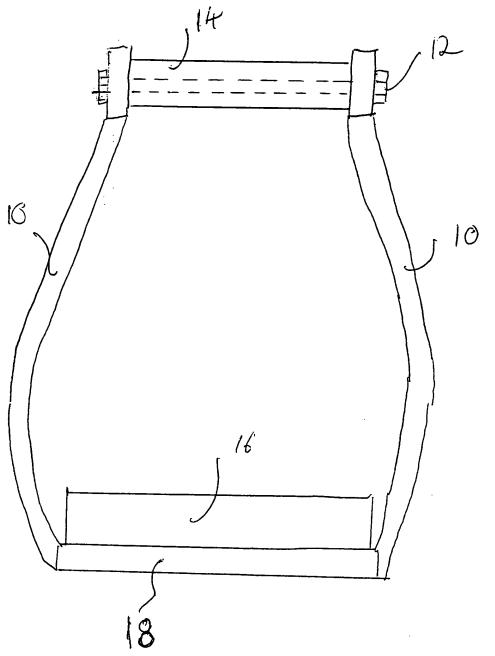
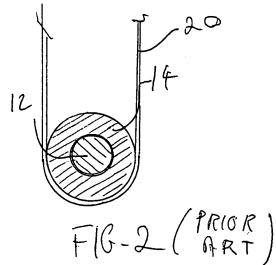
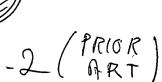
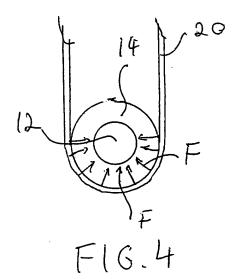


FIG-1 (PRIOR ART)







(PRIOR ART)

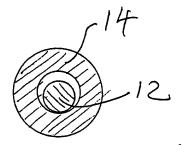
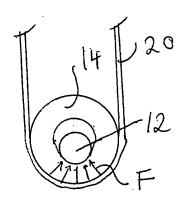
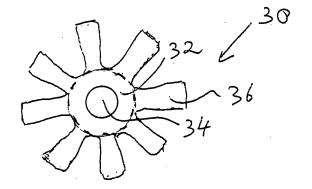


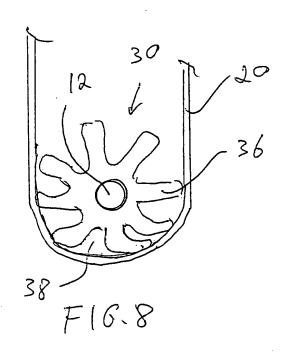
FIG. 3 (PRIOR)

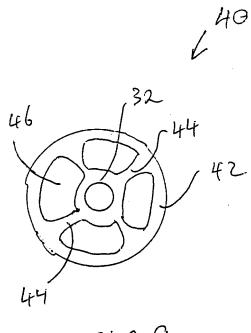


F16-5 (PRIOR ART)



F16.6





F16-9

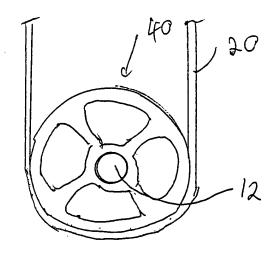


FIG. 10

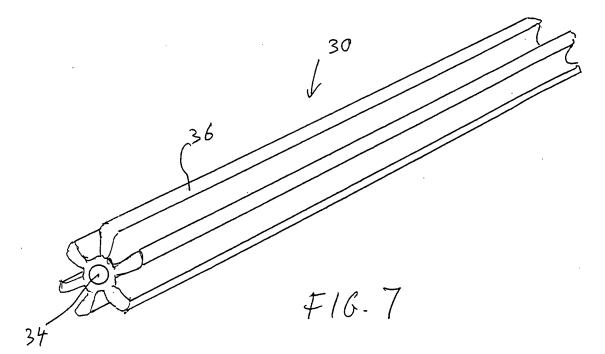


EXHIBIT B

References relied upon by the PTO in the final rejection of the claims:

- 1. U.S. Patent No. 3,515,417 to Bowman.
- 2. U.S. Patent No. 6,220,004 to Hsi-Chang.

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Kathleen C. Tennant

TRANSMITTAL OF BRIEF ON APPEAL

Dear Sir:

Pursuant to the provisions of 37 C.F.R. 1.192, the appellant is hereby submitting three (3) copies of a Brief on Appeal in the above-captioned patent application.

Please charge the \$250.00 appeal brief filing fee required by 37 C.F.R. 1.17(c), and any other cost or credit any overpayment associated with the filing of this Brief on Appeal, to our Deposit Account No. 17-0055.

Respectfully submitted,

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